

The minima treated in the same way give the following:—

Period = 8.43 days
Mean epoch = 1885, Dec. 1.46.

On the New Star in Orion. By J. E. Gore.

I first saw this star with a binocular field-glass on December 13, 1885, at 9.20 P.M., Dublin mean time. My attention was attracted to it by its very reddish colour, and its absence from Harding's charts.

When first seen the star was slightly but *distinctly* brighter than χ^2 (57) *Orionis*—about 0.15 magnitude. It has since slowly diminished in brightness, and the following are my estimates of its magnitude, the comparison stars being

	Mag.
χ^2 <i>Orionis</i>	6.3
Lalande 11088	6.6
DM. 20°, 1156	7.2

Observations of Nova Orionis.

	Mag.	
1885 Dec. 13	6.15	Clear sky.
14	6.4	Drifting clouds.
16	6.3	Strong moonlight.
22	6.6	" "
25	6.9	" "
27	6.9	Clear sky; no moon.
28	7.0	" "
1886 Jan. 6	7.3	
13	7.5	
16	7.7	

Continuous observation was prevented by cloudy weather.

On a New Star in the Constellation of Orion. By Ralph
Copeland, Ph.D.

On December 13, 1885, Mr. J. E. Gore, of Beltra, Ballysodare, Ireland, observing with a binocular, found a reddish star about 6 mag. some 20' following χ' (54) *Orionis*. The star not being given by Harding, Lalande, Heis, or Birmingham, Mr. Gore suspected that it was either a "new star," or a remarkable variable. Mr. Gore's attention was attracted to it by its red colour and its absence from Harding's atlas.

On the receipt of these particulars from Mr. Gore on December 16, the star not occurring in the *Durchmusterung*, or, with certainty, in any of the usual catalogues, a telegram was immediately sent to Cambridge, U.S., and on the following day a circular giving a short account of the star was distributed by post. On the night of December 16 the star had been recognised by its orange-red colour, its place approximately laid down and the spectrum examined with a prism in front of the eyepiece as well as with a low-power spectroscope. Comparisons with neighbouring stars gave a magnitude of 6.3, from which it seems to be slowly declining, if reliance can be placed in the slight change in the following estimates :—

Dec. 22	Mag. 6.5	Dec. 26	Mag. 6.5
24	6.5	29	6.6
25	6.5	Jan. 2	6.6

A prompt telegraphic response from Harvard College gave the brightness as 6.0 mag. on December 16.

At the first glance the spectrum was seen to be a specially beautiful one of type III., but it was not until a powerful compound prism was brought to bear on it on the 17th that its extraordinarily marked character was fully realised.

The large number of details thus rendered visible are shown in the following table, which gives the wave-lengths as they resulted from each set of observations, with the mean values.